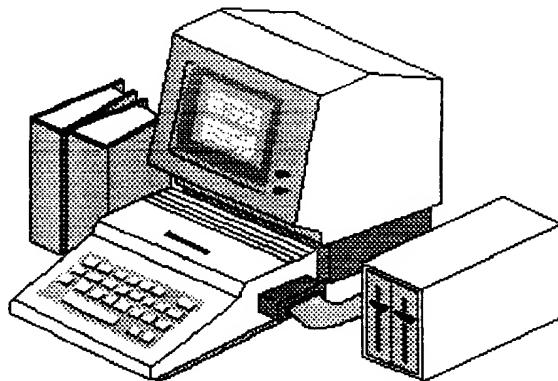


CoCo 123

October, 1995
Volume XV, Number 4



The VicePresident's /term

by Tom Schaeffges

It's been awhile since you have heard from this board member. So let me introduce myself. My name is Tom Schaeffges I've been a member of the Glenside Color Computer Club for a little over three years now. I have worked and played with the Color Computer for about five years. I ran under BASIC for my first 2 1/2 years then was introduced to OS9. of course I had to get the Multi-Pak, hard drive, RS232 Pak, etc, etc... I found a new world in this computer and decided to find others that had my same interests. It doesn't take long to find a club once you been to a Fest.

I joined GCCC and came to all the meetings started to learn the names of the members and also a bit more about my computer. I enjoy seeing the group and I think you could say, I turned into a CoCo nut. I ended up collecting more and more and more until I figured it time to get rid of some of the stuff I had 6, 8, and 4 of, and maybe also help out others that were looking for this stuff. I took inventory and started up The CoCo Cellar. Finally a relief point, a place for the stuff to purge. My bed room will never be the same. To think that this hardware obsession almost kicked me out on the couch. Now with my first year at the '95 fest as The CoCo Cellar the inventory has come to rest just in the corner of the room now.

After my third year with the GCCC I had the honor bestow upon me to be nominated as the president of GCCC. I had to decline the position because of my work schedule, but I did accept the Vice President position. Within the last year because of my new job (working with Cellular One of Chicago) and my personal life I've found myself with less time on my hands. I wouldn't give up my time with the GCCC for anything right now. I enjoy the time to come and spend with the club, even if I end up coming late. I don't think I would ever give up my Color Computer. Besides having so much personal information in it and using the programs I wrote for it, I just plain and simple enjoy it too much. Well, in closing I hope you share the same feelings as I when it comes to the GCCC so that it will continue on for many years to come.

6th Annual Atlanta CoCofest

Sat. Sept. 30, 9:00 AM-5:00 PM

Sun. Oct. 1, 10:00 AM-3:00 PM

Holiday Inn, Northlake
Tucker, GA (Atlanta area)

Vendor setup:

Fri. Sept. 29, 6:00 PM-9:00 PM

Admission: \$10.00 (Whole Show)

Reservations:

1 (800) 465-4329 or

1 (404) 938-1026

CoCo 123 Information

The Glenside Color Computer Club of Illinois is a not-for-profit organization whose members share an interest in the Tandy Color Computer. The CoCo 123 is the official newsletter of the Glenside Color Computer Club. The Glenside Color Computer Club of Illinois has no affiliation with Radio Shack or and/or the Tandy Corporation. The opinions expressed by the authors of the articles contained within this newsletter do not necessarily reflect the opinions of the Editor, the Executive Officers, or the actual club membership, but the editor reserves the right to edit submissions for space and content reasons.

We are committed to publishing a minimum of four issues and a maximum of twelve issues per calendar year. For a fee of \$15.00, for January through December, you can become a GCCC member with full membership privileges. Send your dues to:

**GEORGE SCHNEWEISS
13450 N 2700 E
Forrest, IL 61741**

Here is a list of the 1995 Executive Officers and how to contact them. The club has four strong SIGs, Tandy Color Computer 1, 2, 3, and OS-9. If you have questions concerning these computers or OS-9 call one of these officers.

POSITION	NAME	PHONE	PRIMARY FUNCTION
President	Eddie Kuns	708-820-3943	The buck stops here
Vice-President	Rob Gibons	708-776-9842	Meeting Planning, etc.
Vice-President	Tony Podraza	708-428-3576	Fests & such
Vice-President	Tom Schaegeles	815-337-0117	Demos
Secretary	Sheryl Edwards	708-344-5632	Records and Reporting
Treasurer	George Schneeweiss	815-832-5571	Dues and Purchasing
Editor	Mike Warns	708-627-9561	Newsletter coordinator
Telecom	David Barnes	708-587-9820	Club BBS SysOp
Printer	Dennis Devitt	708-629-2016	Newsletter Exchange
Advertising	Bob Swoger	708-576-8068	Newsletter Ads

CoCo 123 Contributions

If you would like to contribute an article, upload a file to the Newsletter Submissions section of the Glenside's Cup of CoCo BBS. Ditto for ads and news about your group. Please include a name and an address or phone number. If you would rather submit your article on diskette, they can be accepted in ASCII form and unformatted in the following formats:

RS-DOS 5-1/4" SSDD, 35 tracks
OS-9 5-1/4" SSDD, 35 tracks
MS-DOS Any standard format

Mail your articles to:

**Mike Warns
31 South Edgewood Avenue
Lombard, IL 60148**

Submission deadline for the CoCo 123 is the 15th of each month. Articles submitted after the deadline will appear in the next issue.

CoCo 123 Newsletter Exchange

The Glenside Color Computer Club of Illinois is pleased to exchange newsletters with other Color Computer or OS-9 user groups at no charge. Send your newsletter to:

**Dennis Devitt
21 W 144 Canary Road
Lombard, IL 60148**

**Hey I've got an IBM PCXT "Portable" with 20mb hard drive,
printer, and everything except the wall socket and desk
FOR SALE for more than you are willing to pay!
Call Mike Warns, 708-627-9561 and make an offer.**

Reprint Policy

If you desire to reprint any articles that appear here, please provide credit to the author and this newsletter.

We encourage your user group to copy this newsletter and distribute it at your regular meetings to your members free of charge as we believe that this will encourage better meeting attendance. If you are a user group that feels as we do, please let us know and send us your newsletter. We will then distribute it to our members and keep our attendance up.

Glenside Club Meetings

The Glenside Color Computer Club meets on the second Thursday of each month from 7:30 to 9:30 PM at the Glendale Heights Public Library. A social get-together always occurs afterward at the Springdale Restaurant.

Future meeting dates:

**October 12, 1995
November 9, 1995**

Editor: Mike Warns

Design, layout, graphics: Walrus House Enterprises

A special tip o' the hat to Dave Barnes and BARSoft Publishing, whose masthead page has been, uh, more than an inspiration for this issue's.

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These are your BBSs. Please support them.

Glenside CoCoRama BBS

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9600 Baud**

SandV BBS

708-352-0948

An Unimaginable Baud Rate

Glenside's Cup of CoCo

**708-428-0436
2400 Baud**

Chi-CoCo BBS

**312-735-3355
14,400 Baud**

Glenside East

**708-632-5558
9600 Baud**

The Editor's Corner

by Mike Warns

Last month, Eddie Kuns challenged the club members to write about how they got started with the Glenside Color Computer Club. Well, I don't need to be asked twice! (Anybody who has tried to get a newsletter out of me knows you have to ask **more** than twice. Bribes work, too.)

I was in high school in the late Sixties and early Seventies. Some of my friends were working with the school's IBM 360. They showed how much fun they had programming in Fortran on cards. They kept telling me how cool it was, but I was negatively impressed; the program debugging seemed pointless effort that would have frightened Sysephus. Now they are rich. The revenge of the nerds is real life.

In 1981, I was working as a drafter. One of my job duties was to draw charts for the company meetings, but that is not fun or fast when you are drawing them by hand. My boss remembered an old (at that time, even!) Hewlett-Packard computer which had software to draw charts and a plotter for hard copy. I can only imagine how much this setup had cost in 1977 or 1978.

We dug it out and set it up. The "computer" was, well, I'm not sure **WHAT** it was. I have heard the term "smart terminal." If I understand that right, then this must have been one of them, as long as your definition of "smart" is seen through 1977 eyes. When you turned it on was in terminal mode. BASIC could be loaded from one of two data tape drives--not cassettes, but small cartridges like the ones used in tape backup systems. On the other hand, it had 48k when most computers had a lot less and a 132-column screen you could actually read. It even could scroll backwards about fifteen screens in any mode. I still miss those features.

Loading BASIC took about five minutes, if it worked. Loading the chart software took another three minutes, if it did not crash the system. The version of BASIC was not compatible with the manuals I found. Overall, the misery level was only slightly less than the IBM 360, but it was enough less. I was hooked.

I found an unmarked plastic box with phone cable hanging out one side and a computer cable hanging out the other. I had never seen a modem before, and had scarcely heard of such a thing. With the creativity that come from simply not knowing any better, I got it to work. I got some BBS numbers out of a magazine. Of course, half had been disconnected. The others seemed to exist so the members could flame each other. I got an early bad

taste in my mouth for boards where the users used handles and could abuse others while staying anonymous.

Even with the system's reliability problems, it sped chart creation up so much that we started to pressure for a full-fledged computer-aided drafting system. The CAD system came in the guise of a heavily hot-rodded Apple II+. The CAD software was not very useful, and we had to wait for the next upgrade to really start to use it.

The upgrade was hardware as well as software. The hardware was an Apple IIe with a 68000 coprocessor unit and a five-megabyte Corvus hard drive programmed with Apple Pascal (I never could figure that software out!). The hard drive could be backed up on a VCR; a built-in feature that never worked but took forever. It was one weird setup, and I loved it. In fact, I have only recently driven out all but the last vestiges of Apple Lust thanks to that baby.

I needed a home computer, too, but I could not afford an Apple. That seems to have been a common reason for people to buy their first Color Computers, but I could not afford one of them, either. K-Mart had Times-Sinclair TS-1000s on sale for \$99, with the sixteen-kilobyte module for free. This I could afford.

If any of you have used Sinclair computers you know how sensitive they were to the volume at which the tapes were recorded and played. A data recorder would have fixed that right up, but I could not afford one, nor did I realize how well one would have worked. (The other side of the coin of innocence is the assumption that you are the cause of all errors.) Imagine my surprise a few years later when I first hooked a data cassette player to it and the program loaded on the first try! So it goes. Instead of learning how to use the computer, I spent a long night and an early morning finding semi-reliable settings for loading and recording. The system never worked especially well, but I kept plugging away.

At the time, Byte Magazine was fond of testing languages and systems with the Sieve of Eratosthenes. I missed the issue where they explained 1) Who Eratosthenes was, and 2) What was his sieve, and Byte never looks back. You miss an issue and you are sunk. As a user who could barely speak BASIC, I could not figure out the code on the rare occasions they printed it in some obscure language like Actor, Golden Common LISP, or C, so I continued in blissful ignorance.

I decided it would be fun to use the Timex (sorry, Bob Swoger, but I rarely called it a Sinclair, although I knew its pedigree) to find prime numbers. After an evening of fiddling I came up with a method that was fairly efficient. It disposed of the sticky

problems of zero, one, and even numbers, as I figured their primeness or lack of it had been pretty much established. Years later I found out who Eratosthenes was (a Greek guy who wanted a way to find primes; he did a lot more, but that is what pertains to the story) and what his sieve was (a way to find them). My program used an algorithm similar to his. He even ignored zero, one, and even numbers! I was proud as only an accidental computer nerd could be. If only my high school math teachers could have seen me get something right!

I had inherited an old gold coin from my grandmother, and I had kept it for more than ten years. However, I needed a better computer. I hocked it (coin collectors' note: I got a good price and its value has remained stable since 1986, so it was no loss) and used the money to buy a TRS-80 Model 1 with the expansion chassis and one disk drive. It did not have a TRS-DOS disk, and a guy at the local Radio Shack (okay, in this area it is "one of the many local Radio Shacks") directed me to a fellow named Mark Blackman, whom some of you may remember. Mark got me a TRS-DOS disk and I ordered the manuals from the Shack.

Somebody directed me to a Shack in, I think, Stone Park which had a back room full of Model 1, 3, and 4 software for close-out prices. I was in hog heaven. I have tried to find the store since, but it has vanished like an "antiquities" shop in a bad horror story.

Other software was acquired through, ahem, alternate means. (Is it piracy if you cannot find someone who can sell it to you? And the manufacturer is out of business? And the guy at Radio Shack laughs at you and tries to sell you a Tandy 1000? Yes, but....)

The disks the Model 1 used were single-sided, single-density, 35-track. About 65k per side, formatted. Not a lot of space. If you tried putting too much on a disk, Trash DOS did not bother your pretty little head with technicalities like "disk full" errors. It just put the extra stuff on the track where it had kept the directory. Would have left Peter Norton himself scratching his head, wondering where his data went.

I needed technical support, and Mark could not hold my hand as much as I needed. He suggested the Glenside Color Computer Club, which was forming a Z80 special interest group. The first meeting I attended was filled with misery for me, as I had been laid off that afternoon. A good omen that I would have as much fun with the CoCo as I had had with the HI-P, Sinclair, and Trash-80 before it. The Z80 SIG met a few times; I went once but kept going to the main meeting every now and then.

I was intrigued by the Color Computer the club members were so enthusiastic about. I became infected with the enthusiasm and resolved to pick one

up when I had a more regular job.

Tune in next month, kids, when Mike stops talking about it and actually buys a Color Computer! And becomes a club member, which was supposed to be the point of all of this! Maybe he'll even make it into the Nineties! He's only up to '87, you know!

Lots of Minutes

by Sheryl Edwards

You might forget that Glenside is a real club with meetings and everything, especially if you base your impressions by how often I publish the club minutes. Sheryl has been so kind as to write these up, so here they are to remind you of what you missed when you missed that meeting.

February, 1995, Club Meeting

The meeting was called to order at 7:55PM and started out with old business. First order of business is that dues are overdue and need to be paid as soon as possible, especially officers! Next item is the fact that the CoCo Friends Disk Magazine needs eight or nine people to keep it going and to take it over. It seems to have lost interest with the members and we need to revive it. See Brian Schubring for details.

Tony Podraza said that the club has about ten 6309s for sale for \$9.70. They are a good idea for a backup. As one great, wise, old young computer genius once said, "If you don't have one you will need one and once you have one you won't need it!" (*Editor's note: It's true! I have a 6809E in a junk box that has protected my equipment for years! By the way, those chips are probably no longer available, so please don't bother Tony about them!*)

Next, we moved onto new business. I brought up an idea for a "Birthday Club." Something to add to the newsletter each month. Anyone interested can send in his or her birthday (year optional) to the editor and we will put it in the newsletter each month. (*Editor's note: Errrrr, I have that list here somewhere!*) Also, people can send in a little letter to let us know how they use their computer--whether it is a CoCo or not (no penalties for other computers). This will hopefully promote all of us to write into the club comments, complaints, or other ideas for more items for the newsletter. We could also pick out certain people to be the "User of the Month."

Brian Schubring and Mike Carey (from Tennessee)

were/are working on some interesting MIDI paks. They are talking about building some and selling others as kits for anyone who wants to tinker on their own time. The pak will also have two serial ports. They hope to have some ready soon.

Howard Luckey brought up the fact that Ed Hathaway has some stuff to sell off if someone wants it. Contact Howard or Ed directly. (*Editor's note: Another deal you are finding out about too late! In fact, the rest of Sheryl's notes are about deals you missed, so we will go on to other things.*)

February, 1995, Board of Directors Meeting

The meeting started at 9:30PM.

The board of directors has decided that Dave and Nancy Meyers are to be given Honorary Memberships for their contributions to the CoCo cause.

The club will offer \$350 for a Fest keynote speaker.

Anyone who wants a copy of the club bylaws can send a stamped, self-addressed envelope and one dollar for a copy. (*Editor's note: Send it to one of the officers (addresses in the front), not to me! I don't even have a copy!*)

March, 1995, Club Meeting

The March meeting was called to order at 7:54PM. As old business, the board of directors has accepted the bylaws. The club will contribute some money for a keynote speaker at the Fest. There is a good number of vendors signed up.

We are still working on about forty e-clock-fix boards to be given away at the Fest. (*Editor's note: Didn't get one? Look in your back issues and build one yourself!*)

Paul Jerkatis says that the CoCo emulator for IBM PCs seems to work okay.

The three vice presidents have been given specific roles: Tom Schaeffges is responsible for demonstrations at the meetings, Tont Podraza is the Fest VP, and Rob Gibons is Senior Vice President.

The demo was done by a gentleman named Chuck, who happens to be a friend of Len Zelinsky. The program draws Lissajous figures on the screen. Different polar coordinates result in different figures. (*Editor's note: Sheryl drew several of the figures on her notes, including a heart, a butterfly, and some stuff that looks like it was drawn on a Spirograph.*)

April, 1995, Club Meeting

Meeting started at 8:00 with our usual introductions. Our first order of business was about

the Fest. Who would be the guest speakers? Also, let's not forget we will be bringing back the no-minimum-bid auction!

Make sure we all go to Radio Shacks near us and to other places to hang up flyers and put extras on counters.

A free ticket and newsletter were sent to Bryan Fondrick of Salem, Oregon.

As a lighter gesture, Bob Swoger was given a steering wheel as head of the Steering Committee.

1995 Fest Meeting

The Fest meeting started at 9:15AM. The introductions started first. We had three guests from out of state: a Wisconsin gentleman, a Maryland gentleman, and a passerby from the hotel.

The Disk of the Month will be available at the Fest for anybody interested; see Bob Bruhl. The money from the auction is used for the Fest setup fees, room fees, and for next year;. Glenside members do not keep any of the funds!

The dates for next-year's Fest were announced at the meeting. The dates announced were to be the last week in April, 1996, but they were wrong. The new dates are in the works right now and will be announced later.

The meeting was short and sweet; we adjourned at 9:45.

May, 1995, Club Meeting

The May meeting began at 7:44PM with Rob Gibons presiding. The dates for next year's Fest were announced: April 13th and 14th, 1996.

Brother Jeremy had the complaint about every year leaving the Fest with another dirty habit!

Marty Goodman could not make the Fest because he had to "pass gas!" (Dr. Goodman is an anesthesiologist!)

Howard Luckey had the chance to attend the Sculptor and OS9 meetings. Anyone who missed them should get in touch with him.

We would like to give our complements to Dennis Devitt for the T-shirt transfers.

Good, old Carl Boll will not be with us for a couple of months. He has gone to Mexico City on business for his ex-employer as a consultant.

We took a break and then came back to fold newsletters.

Before Carl leaves, he brought up an idea for next year's Fest committee: Let's form it now! Tony and Carl need help with things now, not just at the last minute. Show guides, cups, mugs, buttons, shirts,

badges, table setups, and sign hanging. Logo designs need to be thought about now, too. Let's put on those thinking caps and come up with some logo ideas. Please send them into us, marked "Logo Ideas."

June, 1995, Club Meeting

The meeting started at 8:00PM with introductions, as usual. This time, we had a visitor named John French. He has a CoCo 3 and wishes to trade hardware for software. If anyone is interested in helping him, we have his address and phone number.

The next order of business is the picnic. Our annual picnic (after a long discussion) will be held on a Sunday, not a Saturday this year, with no rain date. The date is September 17th, and, as always, the arrival time is around 1:30PM. Get there at 1:00 to help set up. As usual, the club will provide the meat and bread. The members will provide the extra chairs, music, pop, chips, salads, and desserts. No computers, except for game playing. Don't forget bug spray and your volleyball shoes and clothes. (*Editor's note: Forget it; you missed that one, too. I ate your hamburger.*)

We have Fest totals: \$1282 from the front door and vendors and \$572 from the auctions.

Don't forget the Atlanta Fest, September 30th and October 1st. (*Editor's note: Hey! You still have a chance to get to this one!*)

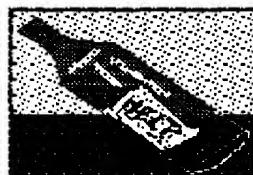
July, 1995, Club Meeting

The meeting started at 8:00PM, as usual, but the only difference is that this was our hottest meeting. We started with intros and then found we had a newcomer writing us a letter looking for things. Hopefully, we can help him. At least his letter will be in the newsletter. (*Editor's note: It is!*)

Next business that came up was that the ham fest in Grayslake is one week **before** the Atlanta Fest and will not conflict with anybody's schedule.

Mark Farrell and Tony Podraza are possibly going to Atlanta. The club should/could pay for a club table. We could bring our sign for the table from the CoCo Fest. There was a motion to reserve a table, which passed.

We have a complete system for sale, \$350 for a full setup. We also have an Electronic Bible and Concordance (IBM and CoCo version) for \$15.00 a copy.



Letters to Glenside

by William Rockett

and Dan Lotridge

Letters? We get letters! These were sent to George Schneeweiss. Please take up where I left off to help these guys out.

March 28, 1995

Dear George,

I received your letter today and so am promptly replying. Thanks for your prompt reply. I am enclosing a check for \$15 for a year's dues. As of yet I have not received my canceled check, so it is still out there. Tony must of got my second inquiry, which I mailed a couple of weeks ago. My telephone number is on the check, but here it is: 1-414-594-2810.

Let me first tell you about my system. I have a 512k CoCo 3, TV, a single disk drive (FD-501), and a DMP-120 printer. I am 53 years, a bachelor, and live near Eagle, which is about 40 miles southwest of Milwaukee. Like you I left the city a long time ago. I have been using a CoCo for the last 14 years. Went through 1 and 2 and 3 with 128k. I recently bought the 512k. Truth be told, I have little programming ability. Mostly I had it to key in programs from Rainbow until they folded. When I bought the Mod 1 back in 1978 I had no computer knowledge, but the graphics fascinated me. Then the CoCo came out and there was color! I wish I knew how to draw because those graphics sure do fascinate me.

I belong to the M.I. and C.C. Club in Des Moines, CoCo Trader, and Adventure Survivors. Hopefully I can now include yours. I just sent off to Jim Sternett an order for a DMP-130 printer with color capabilities. I should also tell you that I have never attended any of the Fests. Mostly, because I could never afford it. I don't have a decent car now, so will be unable to attend any meeting even though I live around 60 miles north of where the meetings are held. Therefore, I will just have to be a silent member for a while.

I recently replaced my DMP-105 and 501 2-disk drive, both of which went out on me. I have no electronic or mechanical abilities; all that technical stuff is Greek to me. For me, everything's got to be kept simple. I have all of the Rainbows and am slowly building up my library of software. I have now over 250 disks. Recently, I got from MICC their 100 Random Disks offer.

Well, that's about it for now, George. Hope this

gets through and I hear from you soon.

Thank you,
William Rockett

July 5, 1995

Dear George,

I have been receiving the Newsletter, thanks to you. I am inquiring about if the club has a library or not. If so do you have a list of what's in it? Do you make copies for the members? I do not have a modem and hence do not have access to the BBSs.

I did not get a chance to go to the Fest, since I don't have a car. I hope you all had a good time. I have a problem with a DMP-132 printer which I purchased from CoCo Trader a couple of months ago. As far as I know, the printer works; at least the carriage moves and the self-test works; but it does not respond to commands from the computer. It will not execute any PRINT#2 commands either directly from the keyboard or from a program. I don't know what's wrong with it. I don't understand any technical stuff at all. I have written to Jim Sternett about it, but have not got a reply yet. I also have a DMP-105 that doesn't work properly. I think that the print head is plugged. As I said, I have no technical knowledge about these things. I like it; it has italics and special characters and graphics that I could use. It just sits there idle.

I am sorry that I can't come to the meetings. Some of what is written in the newsletter sounds like fun. But, as I have said, I don't have a car.

I am enclosing a check for \$15 to renew for another year. My phone number is on the check.

Sincerely,
Willie

Dear Willie,

With you stuck in Wisconsin, it looks like it is time to start learning some of that technical stuff. We'll start with the DMP-105 and its clogged print head. You will need some rubbing alcohol and a sheet of Kleenex.

I do not know how to remove the print head on the DMP-105. I used to have a DMP-101, but did not have it long enough to break it. If it is a pop-out type this will be less of a pain than if it is a screw-in type, but, either way, do not take it apart any more than you need to and remember where everything goes.

Once you have it taken apart, apply a drop of alcohol to the holes in the print head with your fingertip. Rub it around some and let it soak in. Dab off the excess with the Kleenex, taking care that you

do not catch any paper fibers in the holes (it is clogged enough already!). Repeat the process until the alcohol you dab is clear. Apply some more alcohol and set it aside to soak while you check the settings on your other printer.

My guess with the DMP-132 is that the signal is either not reaching the printer or is reaching it in a form the printer does not expect. I assume that your printer cable is not shorted out and is the cause of problems in both of your printers. Did the DMP-105 work at all? No? Go to Radio Shack for a new cable. It just did not work very well? Then go to the next step. (I hope the C programmers out there are not offended by the "GOTOs!")

Next, we will check the printer so we know what it is expecting. As I remember Radio Shack printers, the DIP switches that control input are labeled. If they are not labeled, get out the manual. First, make sure that it is not expecting parallel input. Maybe the previous owner last used it attached to an IBM computer. If so, reset it for serial input.

It still does not work? Is the baud rate, the speed at which the printer expects the data to be sent, the same as the rate the computer is sending it? The Color Computer defaults to sending data to the printer at 600 baud. Is the printer set the same way? If not, reset it. Does the printer work now? No? Write Jim Sternett another letter! He stands behind what he sells.

Back to the DMP-105. Apply some more alcohol to the print head and dab it off. You are getting ink which was dried inside the pin holes and I will bet that it is almost as gray as the first time you did this. Repeat until what you get out is clear.

I hope you remember how to put everything back together, because that is what you have to do now. Put in some paper and print a single row of mixed upper and lower case characters (include some with descenders, like lower-case "G"). Are all of the pins firing (you do not see a stripe of white down the row of characters)? If they are operating within established parameters, then you are done. If they are not, discontinue the test immediately and repeat the cleaning procedure. You are grasping at straws, but it is possible that the pin is stuck rather than broken.

When you are done, test it again. If it did not work this time, you can assume that a pin broke in the print head. This can happen when it gets stuck in the glop you just cleaned out of the print head.

I do not wish to sound like Marty "That's junk; throw it out and buy a new one" Goodman, but a DMP-105 with a broken pin is a nice source of parts for another DMP-105 (or DMP-102, or DMP-101). It has declared its own retirement. A new print head will cost you a lot of money, a lot more than, say, a DMP-105 with a broken power supply, so keep your

eyes open for another broken DMP-101, 102 or 105 (I am not sure just how many bits are interchangeable between the various DMP10xes, but I suspect a lot.) Take the print head out of the one and put in the other.

The key is to not be afraid of "the technological stuff." The CoCo is perfect for learning troubleshooting: it is cheap, easy to repair, and you have access to people who have broken and repaired everything in, on, or attached to it. You can also get service manuals for it, something you cannot say about most other computers. Start with the easy stuff, like those printers, and you can move on up from there.

By the way, I bet it would be easy to take the Drive 1 out of that "broken" FD-501 and put it in the good one so you can have two drives again. Eight or ten screws, one power supply connector and one data cable, then reverse the process. Taking one apart shows how to put the other together. Just keep track of the orientation of the data cable (see the response to the next letter).

Mike Wams

Editor's note: Maybe some of you can help this fellow. If so, please write directly to him, or to us, or both (I'm sure many people would like to know the answers to some of his questions, and we will put the answers in the newsletter).

Dear Glenside CoCo Nuts,

Hello, my name is Dan Lotridge. I am a 24-year old newcomer to the CoCo community interested in joining your fine organization. I was truly upset not to be able to attend the CoCo Fest this year (I would have spoken to you then). I have a CoCo 3, a 512k upgrade, two drives, an RGB monitor, a few joysticks and a few games. I am in need of a printer, some desktop publishing software, and a few books on programming. ie, "Peeks, Pokes, and Execs," and "Disk Basic Unravelled."

My interests include using graphics, adventures, sound sampling, hardware tinkering, and as much programming as I can learn. I'm not sold on using OS-9 yet.

I am looking for a few pieces of hardware that one of your club members may know something about. First, I am interested in the EARS (Electronic Audio Recognition System) for hands-free programming. Believe it or not, I have a seventy-year old grandmother intent on building the perfect recipe database for her CoCo 2. She is also interested in the Plug-n-Power Pack, as she is confined to a wheelchair. I, on the other hand, want to get my hands on a 3.5" disk drive that will work under Disk

Basic. Without further ado, here's my address:

Dan Lotridge

8891 Pembroke Road, Lot #10

Oakgrove, KY 42262

My goal is to create a graphics adventure with digital voices that allows two or three players. I am also experimenting with point-n-click programs and looking for a light pen with software applications for a few other ideas.

Thanks a lot,

Dan Lotridge

Cpl, US Army Infantry

P.S. Who has the rights to CoCoMax III and Max 10? Where can I buy them?

Dear Dan,

Even I can help you with some of this! If you want to use a 3-1/2" drive with RS-DOS, you have to use a 720k model, not the more common 1.44m one. Someone will correct me if I am wrong, but it is my understanding that the Tandy drive controller will not work with the high-density drives.

Installation could be easier, but not much! Buy the brackets, bezel, and connector adaptors from the cheapest place you can (Mid-West Micro has them for a fraction of what they go for some other places). Do NOT let them sell you a cable "that will work with that disk drive!" An IBM-type cable is **not the least bit compatible with the Color Computer**. Just buy the adaptors.

The hardest part is hooking up the adaptor that mates the multi-pin connector on the drive to the card-edge connector on the cable. If your drive has pin 1 marked clearly and the adaptor has a cut in the card edge, you are home free. Install the cable with the red stripe on the same side as the cut and pin 1.

If, as is more likely, pin 1 is marked on neither the drive nor the adaptor, it becomes a process of trial and error. Install the adaptor then the cable. Turn on the drive. If the red light turns on and stay on, turn off the drive. Keep the adaptor on the drive, but remove the cable. Flip the cable and re-install it.

Turn on the drive. The light should turn on for a moment only. Try reading the drive. If it does not read, turn the drive off. This time, remove the adaptor and the cable together. Flip them and re-install. This time the drive should work.

Under plain RS-DOS your new drive will be treated as a 35-track, single-sided, double-density floppy drive; in other words, it will work just like the drive it is replacing. On the other hand, the disks are better protected, fit in your pocket, and are easier to buy these days.

To use the additional space on the drive you have

to upgrade to a different operating system. ADOS does a wonderful job, and feels just like RS-DOS. I used JDOS on a CoCo 2 (it does not work on a CoCo 3); it only let me use forty tracks on both sides, but even that let me fit most of the software I use on a single floppy.

Do it; it's a fun, useful, and easy bit of hardware hacking that will whet your appetite for more complex things.

Mike Wams

The CoCo 3 Emulator

by Rob Gibons

One of my greatest fears has been that something would happen to my beloved CoCo 3 and I would be unable to repair or find a replacement part for it. Because of this I have become (horror of horrors) a Closet CoCo HORDER! Yes, hidden away are not one or two but THREE of everything I need to replace my entire system, excluding my hard drive (I only have one spare). Even so, I have been apt to buy any and all CoCo related hardware that came my way (this is a bad thing? I don't think so.). But no more! Thanks to Jeff Vavasour of Canada, now long after the last of my CoCo's is but a memory, my DECB and OS9 Level II software will still be running! Not on a 68000 or OSK machine but on (and here is the kicker) an Intel based system! (I still can't get myself to say the name of that other so called operating system).

No I haven't lost my mind (I have it backed up to diskette somewhere). But really, thanks to Jeff and first his CoCo 2 and now (Cheers and Accolades) his CoCo 3 emulator, those of us unfortunate enough to have to shell out the cash for one of those systems, can now run their CoCo software on it. Due to the need to be able to run software for work, at home, I am just such a person. And due to diminished desk space (not mental capacity), it is very nice to be able to pack away (no you can't have it, it's mine and I'm not about to give it up) my CoCo system, (or at least one of them).

Emulators are programs that permits software written for one type of hardware, a CoCo 2 or CoCo 3 for example, to run on another machine, an IBM compatible in this case. The better that software mimics the original machine hardware, the better chance it has to run the software written for the original machine. In many cases, the author of the emulator may decide not to support some aspects of the original hardware. In Jeff's case, for the CoCo 3 emulator most aspects of the CoCo 3 are supported (the only exception I know of is the lack of sparklies). Even cassette I/O is supported if you happen to own a Sound Blaster card. Yes, Jeff warns that some

software may not run correctly (those displaying all 64 colors on screen at once for example), but all the programs I have tested ran and that included both DECB and OS9 software! Jeff even supplies some of the best programs to transfer software and data file to and from CoCo diskettes I have ever used.

The one piece of PC hardware that may cause problems is the required VGA card. Not all VGA cards are created equal and some will not permit the emulator to display correctly. For example, on my original VGA card, on 40 and 80 column screens, the first character of each line was displayed on the far right with the rest of the line wrapped to the next line (this can also occur on some CoCos!). Before getting the CoCo 3 emulator, it is best to obtain the freeware CoCo 2 emulator (available on Delphi and Compuserve). Included with that package is a test program VGACHECK.EXE to test your card. Jeff requests you do not send for the CoCo 3 emulator without first trying this program.

All and all Jeff has done a fantastic job!

The following requirements to run the CoCo 3 emulator and instructions on how to obtain it were included in the documentation for the CoCo 2 emulator document coco2.doc.

- A VGA board (EGA graphics are not sufficient). This VGA board must pass all seven tests in the VGACHECK.EXE included here.
- At least 333K of free DOS low-memory.
- Without EMS memory, the emulator acts as a 128K CoCo 3. To emulate a CoCo 3 with 512K, you need 384K of free EMS memory, an additional 96K of free low memory, and an EMS 4.0 driver (such as EMM386 in MS-DOS 5.0).
- An original CoCo 3 will be needed to copy additional ROM information to your PC.

To order the emulator, send the \$25 shareware registration fee and a blank disk to the address below. (If you have an Internet account, and the ability to receive uuencoded .ZIP files, you can elect to receive the emulator via email rather than on disk.)

To get the CoCo 2 emulator, download it from one of the club's BBSs. To get the CoCo 3 emulator, write to:

e-mail address:

jeffv@physics.ubc.ca

postal address::

Jeff Vavasour
c/o Department of Physics
6224 Agricultural Road
University of British Columbia
Vancouver, B.C.
Canada V6T 1Z1

Meeting Location:

Glenside Public Library
25 West Fullerton Avenue
Glendale Heights, Illinois 60172

Directions:

The Library is on Fullerton Avenue, about one-half mile West of Bloomingdale Road. Fullerton is about one mile South of Army Trail Road and about one mile North of North Avenue (Route 64). Bloomingdale Road is about two miles West of Route 53/I-355/the North-South Tollway.

Next Meeting Date

October 12, 199

Glenside Color Computer Club
31 South Edgewood Avenue
Lombard, IL 60148

